Before the
Federal Communications Commission
Washington DC 20554

In the Matter of	**)**	
	)	
Radio Physics Solutions Limited	**)**	**GN Docket No. 19-158**
	)	
Petition for Waiver to Certify and	**)**	
Operate Stand-Off Threat Detection	**)**	
Device in 71-86 GHz Band	**)**	

To: The Wireless Telecommunications Bureau
Office of Engineering and Technology

REPLY COMMENTS OF RADIO PHYSICS SOLUTIONS LIMITED

Radio Physics Solutions Limited ("Radio Physics") is pleased to submit these Reply Comments in response to the Commission's Public Notice ("Public Notice") regarding Radio Physics' Petition for Waiver ("Petition") to permit the certification and operation of the Radio Physics stand-off threat detection device in the 71-86 GHz band.

No Comments in response to the Public Notice were filed expressing concerns with Radio Physics' Petition. Radio Physics included with its Petition letters of support from the architecture firm PBK, the Muller Group International, and REMEC Broadband Wireless Networks ("REMEC"). PBK describes how it would use the Radio Physics stand-off threat detection device to improve school safety and security. The Muller Group International states that Radio Physics' stand-off threat detection technology is an important part of the future security toolbox. REMEC, a leading point-to-point microwave millimeter wave radio manufacturer, agrees that the Radio Physics stand-off threat detection device will not pose a risk of harmful interference to point-to-point microwave operations. These letters are typical of the

strong support Radio Physics has received for use of its stand-off threat detection device in the United States.

Radio Physics believes that the public interest benefits of its stand-off threat detection device are unquestionable. As described in Radio Physics' Petition, large scale threats from bombings and mass shootings are on the rise despite current security technology. Grant of the requested waiver will promote safety and security at vulnerable locations such as schools, government buildings, and places of worship. The ability to detect threats at a distance of up to 150 feet is far less intrusive than any other threat detection technologies available today, and is particularly appropriate for areas where other security methods, such as portal scanners or pat-downs, may be inappropriate or impracticable. The ability to extend security perimeters beyond the range of current technology has enormous benefits in saving lives and protecting critical infrastructure

Further, the Radio Physics stand-off threat detection device will not cause harmful interference to other radio services. Radio Physics' stand-off threat detection devices will be deployed at fixed locations, using highly directional antennas at heights of approximately 15 feet above ground, with down-tilt of at least 3 degrees. In addition, the Radio Physics stand-off threat detection device utilizes a fast sweep of up to 300 microseconds, wide 15 GHz bandwidth and 50% duty cycle. Out of an overabundance of caution, Radio Physics suggests the conditions attached hereto in Appendix A to further mitigate any interference risks. The technical operating parameters and conditions proposed by Radio Physics will ensure no harmful interference will result to other operations.

Certification and use of the Radio Physics stand-off threat detection device will save lives and promote security. Radio Physics has made every effort to ensure its stand-off threat

detection device will be a good neighbor to operators in other radio services and not cause harmful interference to other authorized devices. In that regard, Radio Physics' respectfully requests the Commission expeditiously grant its Petition for Waiver.

Sincerely,

By: /s/

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Appendix A

Proposed Conditions

- The Radio Physics stand-off threat detection device may not be operated within a quiet zone as defined in 47 C.F.R. § 1.924 without written consent from the applicable radio astronomy, research, and/or receiving installation entity.

- Operation of the Radio Physics stand-off threat detection device is subject to the licensing requirements in 47 C.F.R. § 101.1501 of the Commission's rules and the registration and coordination requirements 47 C.F.R. § 101.1523.

- The Radio Physics stand-off threat detection device may not be used to illuminate any public roadway.

- Any license granted for the use of the Radio Physics stand-off threat detection device shall include the following condition:

  "This nationwide, non-exclusive license qualifies the licensee to register the operations of a Radio Physics stand-off threat detection device. The license is permitted under the provisions of FCC Waiver Order _____. The license does not authorize any operation that is not coordinated with the National Telecommunications and Information Administration with respect to Federal Government operations in the 71-86 GHz band and posted as a registered system with the third-party database manager. Nor does this license authorize operation that requires the submission of an environmental assessment, is located in a quiet zone, or is in an area subject to international coordination. For such links, the licensee must file FCC Form 601 Schedule M with the FCC for approval in addition to submitting the link to a third-party Database Manager for registration. See Public Notice, DA 04-1493 (rel. May 26, 2004) >http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-04-1493A1.doc. Further, operations are conditioned on the use of the Radio Physics stand-off threat detection device not being used to illuminate any public roadway."

- Radio Physics may sell up to 1,000 stand-off threat detection devices during the first year following authorization. Radio Physics will notify the Commission of the number of units deployed at the end of the first year.